400 Seventh St., S.W. Washington, D.C. 20590 SEP 1 2 7001

DOT-E 10631 (FIFTH REVISION)

EXPIRATION DATE: July 31, 2003

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: U. S. Department of Defense Alexandria, Virginia

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the transportation in commerce of certain hazardous materials as specified in paragraph 6 below in DOT Specification MC338 cargo tanks. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
- 3. <u>REGULATORY SYSTEM AFFECTED</u>: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR §§ 173.243 and 173.244.
- 5. <u>BASIS</u>: This exemption is based on the application of U. S. Department of Defense dated August 20, 2001, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name / Hazardous materials description	Hazard Class/ Division	Identi- fication Number	Packing Group
Dimethylhydrazine, unsymmetrical	6.1	UN1163	I
Hydrazine, anhydrous	8	UN2029	I

Proper Shipping Name / Hazardous materials description	Hazard Class/ Division	Identi- fication Number	Packing Group
Methylhydrazine	6.1	UN1244	I
Toxic liquids, flammable, n.o.s. (inhalation hazard, Zone B)	6.1	UN2929	I

And other hazardous materials specifically identified to and acknowledged, in writing by the Office Hazardous Materials Exemptions and Approvals (OHMEA) prior to the first shipment.

- 7. <u>SAFETY CONTROL MEASURES</u>: Packaging prescribed is a specially designed cargo tank motor vehicle designed and fabricated in conformance with DOT Specification MC 338 (§ 178.338) and as follows:
 - a. Each cargo tank motor vehicle must conform with the following engineering documents on file with the OHMEA: Process Engineering, Inc. drawings B-27621, Rev 5, dated January 25, 1991; and C-33146, dated April 25, 1991; and Process Engineering, Inc. product specification Model ST-27SMMH, dated April 15, 1991.
 - b. The minimum design pressure for the cargo tank is 300 psig.
 - c. Each cargo tank must be constructed so as to achieve thermal conductance between the inner vessel and the atmosphere of not more than 0.08 Btu per square foot per degree Fahrenheit differential per hour, determined at $60\ ^{\circ}\text{F}$.
 - d. The sliding protective housing must be so designed as to present no flow restriction to vapor discharged from the pressure relief valve. The pressure relief system must communicate directly with the vapor space inside the manway cover. The isolation valve between the pressure relief valve and the vapor space must be locked in the open position except as provided for in the ASME Code, Section VIII, Division 1, during maintenance operations on the pressure relief valve.
 - e. Outlet and inlet valves must be closed by use of blank flanges so as to be gas tight at all times while the cargo tank is in transit on public highways.

- f. An emergency closure kit must be provided to control leaks in fittings on the dome cover plate. At a minimum, this kit must be equivalent to the requirements of \$178.337-10(c).
- g. The motor carrier must equip each unit with a fire retardant blanket which must be readily available for use in protecting the cargo tank from heat in event of a tire fire.
- h. Outage and filling limits must be in accordance with the requirements of § 173.24b.
- i. Cargo tank vehicles while loaded, and where feasible, may not be parked, even though attended, on any public roadway, or within 500 feet of any bridge, tunnel, dwelling, building, or place where persons work, congregate, or assemble.
- Two drivers, meeting the qualifications described below, must be assigned to each cargo tank motor vehicle. Shipments must be transported from origin to destination without layover en-route, except for necessary rest stops of The vehicle must be attended at all times short duration. by a driver, or other responsible and qualified representative of the motor carrier, shipper, or of the Federal Government. Drivers and other attendants accompanying each shipment must be informed of the characteristics of the material being transported and of its inherent dangers, and must be fully instructed in the measures and procedures to be followed to protect the public from these dangers in the event of accident or emergency. Additionally, drivers must meet and are subject to all requirements of 49 CFR Parts 383 and 390 through 397. Further, they must meet the following requirements:
 - (1) Age Not less than 25 years old.
 - (2) <u>Experience</u> The amount of experience required is cumulative full time driving in each category. It may be obtained with one company, or with several companies.
 - (a) Three years driving experience in the transport of toxic hazardous materials that are Poison Inhalation Hazards.

- (b) Five years experience driving semi-trailer vehicles.
- (c) Two years experience driving semi-trailer cargo tank motor vehicles.
- (3) Driver must permit the release of and carriers must submit driver's name, social security number, date of birth, license number(s) and other necessary information to an agency (including state license bureaus) or driver's license registry service.
- k. Carrier must maintain a safety rating, as assigned by the office of Motor Carrier Field Operations (OMCFO), Federal Highway Administration, of "Satisfactory", pursuant to the procedures specified in 49 CFR Part 385.
- 1. The motor carrier must furnish to drivers of each cargo tank motor vehicle written instructions, showing the route to be taken from point of origin to destination, which must be planned insofar as practicable so as to avoid congested thoroughfares, street car tracks, tunnels, viaducts, dangerous crossings and places where crowds assemble. Such instructions must designate the places where stops are to be made for fuel and meals, as well as the procedure to be followed to assure that the cargo tank motor vehicle is attended at all times until delivery to the consignee is accomplished.
- m. The designated routes must be reviewed periodically. Any application for renewal must contain a certification that the designated routes have been reviewed and remain the safest practicable routes, taking into account as a minimum the criteria specified in 49 CFR 397.9.

8. <u>SPECIAL PROVISIONS</u>:

- a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.
- b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

- c. Each tank must be plainly placarded in accordance with 49 CFR Part 172, Subpart F and marked "INHALATION HAZARD" when appropriate in letters and numerals at least 3-1/2 inches in height on two opposing sides of the cargo tank near the placards. In addition, each tank must be marked on the right side near the front, in letters at least two inches high on a contrasting background "DOT-E 10631."
- d. Each tank must be reinspected and retested in accordance with § 180.407 as required for DOT Specification MC 338 cargo tanks. Test pressure must be one and one-quarter times the maximum allowable working pressure (MAWP). Pneumatic retesting using nonflammable gas (e.g. nitrogen or helium) is authorized.
- e. Prior to and after each loading and unloading operation, each cargo tank must be subjected to the HQSA-ALC/SFSP Inspection Checklist Numbers 9 and 10.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seg</u>:
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect. 12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

Robert A. McGuire

Associate Administrator

for Hazardous Materials Safety

SEP 1 2 2001

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sln

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with §§ 107.107 107.109, as appropriate:

Company Name	Application	Issue	Expiration
City/State	Date	Date	Date
National Aeronautics and Space Administration	Sep 27, 2001	CT 18 2001	Jul 31, 2003

Robert A. McG

Associate Administrator for Hazardous Materials Safety